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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,385	04/01/2004	Hossein Eslambolchi	2002-0524CON	7594

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AT&T CORP.  
ROOM 2A207  
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BEDMINSTER, NJ 07921.

EXAMINER
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NGUYEN, VINH P

ART UNIT	PAPER NUMBER
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2829

MAIL DATE	DELIVERY MODE
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05/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/815,385	Applicant(s) ESLAMBOLCHI ET AL.	
	Examiner VINH P. NGUYEN	Art Unit 2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 20-25 and 34-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-25 and 34-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 2829

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 20-22,24,34,36-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Eager, Jr. et al (Pat # 3,374,428).

As to claims 20,34,37, Eager, Jr. et al disclose an apparatus as shown in figure 1 having a cable (2) including a conductor (3) carrying a current and being in contact with and at least partially submerged in a liquid (19), at least one voltage probe (12,13) adapted to at least partially surround the cable (2) with a gap between the at least one probe (12) and the cable (2) whereby the liquid conducts at least a portion of the current across the gap between the probe and an insulation fault on the cable and a voltage comparator (transformer "36") electrically connected to the at least one voltage probe (12,13) for detecting an insulation fault when the voltage probe (12,13) is positioned adjacent the fault. (see column 4, lines 3-9).

As to claim 21, Eager, Jr. et al also disclose a body (11) for holding at least one voltage probe (12,13).

As to claim 22, the at least voltage probe comprises a plurality of voltage probes (12,13) angularly spaced around the traverse section of the cable (2).

As to claim 24, the at least one voltage probe (12,13) presents a conductive surface facing the cable (2).

As to claim 36, the voltage probe (12,13) comprises a plurality of conductive surfaces facing the cable.

As to claim 38, Eager et al apply a high voltage (from 0 to 60KV) (see column 4, lines 43-48) to the cable (2). This high voltage would include a voltage between 80 and 100 volts.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 23,25,32,35 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eager, Jr. et al (Pat # 3,374,428) in view of Applicant admitted prior art Eslambolchi et al (Pat # 5,644,237).

As to claims 23, 32,40, Eager, Jr. et al do not disclose his cable is an optical fiber cable. However, Eslambolchi et al teach that it would have been well known to have a cable such as optical fiber cable type. It would have been obvious for one of ordinary skill in the art to use the device of Eager, Jr. et to detect the insulation defect a different type of

cable such as the optical fiber cable as taught by Eslsmonolchi et al. Furthermore, the type of the device under test is not given any patentable weight since the device under test is not a part of the invention.

As to claims 25 and 35, Eager, Jr. et al teach that the cable is tested in a liquid. It would have been well known that the liquid could include ground water.

5. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eager, Jr. et al (Pat # 3,374,428) in view of Gooding (Pat # 2,794,168).

As to claim 39, Eager, jr. et al. do not teach the step of sounding an alarm when the fault is detected.

However, Gooding teaches that it would have been well known to provide an alarm by the radio receiver (14) when the fault is detected.

It would have been obvious for one of ordinary skill in the art to provide an alarm as taught by Gooding to the device of Eager, Jr. et al so that it would alert the operator that the fault is detected.

6. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eager, Jr. et al (Pat # 3,374,428) in view of Applicants' admitted prior art (page 3 lines 5-7 of the instant applications).

As to claim 41, Eager, jr. et al. do not teach the step of initially determining an approximate position of the fault by determining a position along the cable where an above ground detectability of the cable locating current degrades.

However, Applicants' admitted prior art on page 3, lines 5-7 teaches using a signal detector of a type well known in the art, a technician locates the conveyance by operating the detector above ground to detect a signal generated by current passing through the cable locating conductor and by using a known technique to determine an approximate location of the fault, in combination with additional steps of claim 34, a technician can quickly and efficiently find the exact location of a cable fault.

It would have been obvious for one of ordinary skill in the art to provide the teaching of Applicants' Admitted prior art to the device of Eager, Jr. et al so that the exact location of a cable fault is determined effectively.

7. Applicant's arguments with respect to claims 20-46 filed on 02/27/07 have been considered but are moot in view of the new ground(s) of rejection.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Bader et al (Pat # 3,346,809) disclose cable insulation test apparatus including a fluid containing cylindrical test bushing having a plurality of electrodes and condenser stacks positioned along a pair of insulating tubes connecting the electrodes.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P. NGUYEN whose telephone number is 571-272-1964. The examiner can normally be reached on 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HA T. NGUYEN can be reached on 571-272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
VINH P NGUYEN  
Primary Examiner  
Art Unit 2829  
05/10/07